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## SEQUENCE LISTING

<110> Junghans, Claas

Wittig, Burghardt

König Merediz, Sven

Schroff, Matthias

<120> Covalently Closed Nucleic Acid Molecules for Immunostimulation

<130> NHL-NP-37

<140> US 00/000,000

<141> 2002-01-27

<150> PCT/DE00/00565

<151> 2000-02-24

<150> DE19935756

<151> 1999-07-27

<160> 15

<170> PatentIn version 3.1

<210> 1

<211> 18

<212> DNA

<213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Construct

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (1)..(18)

&lt;223&gt; Base sequence

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18

&lt;210&gt; 2

&lt;211&gt; 48

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Synthetic Construct

&lt;220&gt;

&lt;221&gt; misc\_feature

&lt;222&gt; (1)..(48)

<223> Mini sequence: circular single-stranded with stem loop structure  
(dumbbell), all phosphodiester

<400> 2  
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48

&lt;210&gt; 3

&lt;211&gt; 60

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

204210.FE/5001

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(60)

<223> AT-2L sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 3

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<210> 4

<211> 116

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(116)

<223> ISS30 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 4

cctagggggtt accaccttca ttggaaaacg ttcttcgggg cggttcttagg tggttaacccc 60

taggggttac caccttcatt ggaaaacggt ctctggggcg ttcttaggtg gtaacc 116

<210> 5  
 <211> 58  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(58)

<223> 5'-phosphorylated oligodeoxyribonucleotide

<400> 5  
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<210> 6

<211> 114

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(114)

<223> ISS30-ds sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 6  
 ttcttcggggc gttctttact aggtcctctc caggttacca cctaagaacg cccgaagaa 60  
 cgttttccaa tgatactagg tcctctccag gttaccacct tcattggaaa acgt 114

<210> 7  
 <211> 68  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Construct  
 <220>

<221> misc\_feature  
 <222> (1)..(68)  
 <223> ISS30-s1 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 7  
 tcttcggggc gttctttttt aagaacgccc cgaagaacgt tttccaatga tttttcattg 60  
 gaaaacgt 68

<210> 8  
 <211> 82  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Construct  
 <220>

<221> misc\_feature  
 <222> (1)..(82)  
 <223> ISS13 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 8  
 cctaggggtt accacctaac gttcttcggg aggtggtaac ccctaggggt taccaccta 60  
 cgttcttcgg gaggtggtaa cc 82

<210> 9

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(60)

<223> AT-1L sequence: circular single-stranded with stem loop structure  
 (dumbbell), all phosphodiester

<400> 9  
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<210> 10

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(30)

1005734.042402  
 204220.FFE/5001

<223> ISS30-IPS sequence: linear single-stranded sequence, first five a  
nd last three phosphoester linkages by thioate

<400> 10  
tcattggaaa acgttcttcg gggcggttctt 30

<210> 11

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(30)

<223> ISS30-I sequence: linear single-stranded sequence, all phosphodie  
ster

<400> 11  
tcattggaaa acgttcttcg gggcggttctt 30

<210> 12

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

10057341-012402  
304270-1775001



<222> (1)..(30)

<223> AT-PS sequence: linear single-stranded sequence, first five and last three phosphoester linkages by thioate

<400> 12  
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30

<210> 13

<211> 116

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(116)

<223> NoSS30 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 13  
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taggggttac caccttcatt ggaaaacctt cttaggggtg ttcttaggtg gtaacc 116

<210> 14

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(35)

<223> Deoxyribonucleotide WOT-11-P

<400> 14  
gaagaacggtt ttccaatgat ttttcattgg aaaac

35

<210> 15

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc\_feature

<222> (1)..(33)

<223> Deoxyribonucleotide WOT-10-P

<400> 15  
gttcttcggg gcgttctttt ttaagaacgc ccc

33

204310 1155001